AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An output driver, comprising:

a pull-up circuit coupled to a signal terminator device, the pull-up circuit including a pull-up compensation resistive element; and

a pull-down circuit coupled to the signal termination device, the pull-down circuit including a pull-down compensation resistive element, wherein the pull-up and pull-down compensation resistive elements to provide analog compensation of output driver signal slew rate against device impedance variation, such that a slew rate of a driver output signal is within a predetermined slew rate range.

2. (Currently Amended) The output driver of claim 1, further comprising:

a pull-up pre-driver to selectively generate pull-up signals to cause a rising signal transition at the driver output pad; and

a pull-down pre-driver to selectively generate pull-down signals to cause a falling signal transition at the driver output pad~~, such that a slew rate of a driver output signal is within a predetermined slew rate range~~.

3. (Original) The output driver of claim 1, wherein the pull-up circuit further comprises:

a plurality of pull-up devices, each pull-up device coupled between a driver supply voltage and the signal termination device.

4. (Original) The output driver of claim 1, wherein the pull-down circuit further comprises:

a plurality of pull-down devices, each pull-down device coupled between a driver group and the signal termination device.

5. (Original) The output driver of claim 3, wherein the pull-up devices comprise:

a plurality of PMOS devices having a source coupled to the driver supply voltage, a drain coupled to the signal termination device and a gate to receive a pull-up signal to activate the

PMOS device to generate a rising signal transition at the driver output pad and a crowbar current using a falling signal transition at the driver output pad.

6. (Original) The output driver of claim 4, wherein the pull-down devices comprise:

a plurality of NMOS devices having a source coupled to the driver supply voltage, a drain coupled to the signal termination device and a gate to receive a pull-down signal to activate the NMOS device to generate a falling signal transition at the driver output pad and a crowbar current using a falling signal transition at the driver output pad.

7. (Original) The output driver of claim 1, wherein the pull-up compensation resistive element is coupled, in series, between a selected pull-up device and the signal termination device.

8. (Original) The output driver of claim 1, wherein the pull-down compensation resistive element is coupled, in series, between a selected pull-down device and the signal termination device.

9. (Original) The output driver of claim 1, wherein the signal termination device comprises:

an Nwell resistive element;

wherein the pull-up compensation resistive element is an Nwell resistor; and

wherein the pull-down compensation resistive element is an Nwell resistor.

10. (Currently Amended) The apparatus of claim ~~2~~1, wherein the predetermined slew rate range is between 0.4 volts per nanosecond (v/ns) and 1.0 v/ns.

11. (Currently Amended) A system comprising:

a peripheral device; and

a chipset having an output driver circuit to couple the peripheral device with the chipset via an interconnect, the output driver including:

a pull-up circuit coupled to a signal terminator device, the pull-up circuit including a pull-up compensation resistive element; and

a pull-down circuit coupled to the signal termination device, the pull-down circuit including a pull-down compensation resistive element, wherein the pull-up and pull-down compensation resistive elements to provide analog compensation of output driver signal slew rate against device impedance variation, such that a slew rate of a driver output signal is within a predetermined slew rate range.

12. (Original) The system of claim 11, wherein the pull-up circuit further comprises:

a plurality of pull-up devices, each pull-up device coupled between a driver supply voltage and the signal termination device.

13. (Original) The system of claim 11, wherein the pull-up circuit further comprises:

a plurality of pull-down devices, each pull-up device coupled between a driver group and the signal termination device.

14. (Original) The system of claim 11, wherein the pull-up compensation resistive element is coupled, in series, between a selected pull-down device and the signal termination device, wherein the pull-down compensation resistive element is coupled, in series, between a selected pull-up device and the signal terminal device.

15. (Original) The system of claim 11, wherein the signal termination device comprises:

an Nwell resistive element;

wherein the pull-up compensation resistive element is an Nwell resistor; and

wherein the pull-down compensation resistive element is an Nwell resistor.

16. (Currently Amended) The system of claim 11, further comprising:

a pull-up pre-driver to selectively generate pull-up signals to cause a rising signal transition at the driver output pad; and

a pull-down pre-driver to selectively generate pull-down signals to cause a falling signal transition at the driver output pad~~, such that a slew rate of a driver output signal is within a predetermined slew rate range~~.

17. (Currently Amended) The system of claim ~~14~~11, wherein the predetermined slew rate range is between 0.4 volts per nanosecond (v/ns) and 1.0 v/ns.

18. (Original) The system of claim 11, wherein the chipset comprises an I/O controller hub.

19. (Original) The system of claim 11, wherein the chipset comprises a memory controller.

20. (Original) The system of claim 11, wherein the chipset comprises an integrated driver electronic (IDE) output driver.